APPENDIX D. A NON-TECHNICAL ABSTRACT

Patients with bladder cancer can be cured by removing the bladder only if the disease is detected early enough. Current research is aimed at improving the surgical success rate and at treating inoperable tumors with chemotherapy. Some bladder cancers seem to arise because problems occur in a part of the cells (a particular gene called "p53") that usually stops cancer. In this clinical research study the investigators are trying to insert a normal copy of the p53 gene into the bladder cancer cells to see if this will cause the cancer cells to stop growing. As a "vector", that is, as a vehicle to get the p53 gene into the cells, the investigators will use an adenovirus (related to cold viruses) that has been altered so it cannot reproduce itself. Patients with inoperable bladder tumors will have the vector placed directly in the bladder for 20 minutes. A urethral catheter will be used to deliver the vector solution into the bladder. Some patients will receive up to 8 treatments given on consecutive days. Because this is an early stage in the research, the investigators do not expect to cure the patients who participate; instead, the immediate purpose of the study is to find out what dose of vector can be used without harming patients and whether the introduced p53 genes will cause cancer cells to stop growing.